

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/538,953 Confirmation No. : 5625  
First Named Inventor : Frank Seidel  
Filed : March 13, 2006  
TC/A.U. : 1792  
Examiner : Elizabeth A. Burkhart  
Docket No. : 011235.56373US  
Customer No. : 23911  
Title : Method And Device For CVD Coating Of Workpieces

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Appellant requests review of the final rejection set forth in the Final Office Action dated January 8, 2010. The Examiner has rejected the only pending independent claim in the patent application, i.e., claim 18, under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,462,013 to Punola et al. (hereinafter "Punola").

**I. Summary Of Appellant's Claimed Invention and Punola**

In Appellant's invention, the "coating granules", which "generate the coating gas" are arranged near the workpieces to be coated. Thus, this providing of the coating granules, which generate the coating gas, near the workpieces to be coated provides for efficiencies over the systems and methods of the prior art.

In one of these prior art systems, which is discussed in Punola and which is even incorporated into the invention of Punola, the coating granules that generate the coating gas are located outside the reactor where the workpieces are located and the coating gas is then introduced into the reactor. Col. 1, lines 34-39. Thus, the coating granules, which generate the coating gas, are not arranged near the workpieces to be coated.

As disclosed in Punola, metal halide gas generators 20, 22 are used "in practicing the invention" to form an oxidation and corrosion resistant aluminide coating on superalloy substrates. The gas generators 20, 22 comprise a bed of aluminum pellets over which a process gas (acid halide gas) flows to form the

aluminum trichloride or trifluoride coating gas. As can be clearly seen in Figure 1 of Punola, the gas generators 20, 22, and thus the aluminum pellet coating granules for forming the oxidation and corrosion resistant aluminide coating gas, are located separate from the coating chamber 10 in which coating chamber the workpieces 45 to be coated are contained. The coating gas is then supplied to the coating chamber 10 from gas generators 20, 22 through lines S1, S2. Col. 4, line 52 – col. 5, line 2.

Therefore, in Punola, as contrasted with Appellant's invention, the coating granules, which generate the coating gas, are not arranged near the workpieces to be coated. Rather, the aluminum coating pellets, which generate the oxidation and corrosion resistant aluminide coating gas, are arranged in gas generators 20, 22, which gas generators are located separate from chamber 10, which contains the workpieces to be coated.

## **II. Clear Factual Deficiencies In The Rejections**

### **A. Punola Does Not Disclose Arranging “Coating Granules” Which “Generate The Coating Gas” Near The Workpieces To Be Coated**

As discussed above, Appellant respectfully submits that Punola does not disclose arranging the “coating granules”, which “generate the coating gas”, near the workpieces to be coated. In Punola, the aluminum coating pellets generate the oxidation and corrosion resistant aluminide coating gas and these pellets are arranged in gas generators 20, 22 which are located separate from chamber 10, and thus, the workpieces to be coated.

In the Office Action, the Examiner has not acknowledged in any way this explicit disclosure of Punola which, as discussed above, is directly contrary to Appellant's invention. Rather, the Examiner has argued that other parts of Punola's system, which have other functions, disclose what is explicitly disclosed in Punola as the “coating granules”. Appellant acknowledges that a reference may be

broadly interpreted, however, Appellant also respectfully submits that a reference may not be interpreted in a manner that is contrary to its explicit disclosure.

The Examiner's argument totally disregards that Punola's "coating granules" are the explicitly disclosed aluminum pellets in the gas generators 20, 22, and instead, argues that the coating granules are the "reactivity-altering material" included in beds B1, B2 in chamber 10. However, Appellant respectfully submits that this "reactivity-altering material" does not "generate" the "coating gas", rather, as even its name implies, only alters the reactivity of the already generated reactive coating gas, which is generated in the gas generators 20, 22, in dependence on the temperature in a coating zone of chamber 10. Col. 2, lines 21-26. Thus, the reactivity-altering material merely alters the reactivity of the generated reactive aluminum trichloride gas based on temperature to provide substantially the same reactivity at all coating zones.

Therefore, Appellant respectfully submits that the reactivity-altering material of Punola's system is not a coating granule that generates a coating gas. Rather, Appellant respectfully submits that Punola's coating granules that generate the coating gas are the explicitly disclosed aluminum pellets that are contained in the gas generators 20, 22, which gas generators form the oxidation and corrosion resistant aluminide coating. All that this reactivity-altering material does is ensure that the already generated reactive coating gas provides substantially the same reactivity for different temperatures in the coating zones. Therefore, Appellant respectfully submits that the reactivity-altering material of Punola cannot disclose Appellant's claimed "coating granules".

**B. Punola Does Not Disclose That A “Process Gas” Is  
Introduced Onto The Reactivity-Altering Material To  
Generate The Coating Gas**

Appellant also respectfully submits that this reactivity-altering material of Punola cannot be interpreted as the “coating granules” of Punola for the further reason that a “process gas”, which is also claimed separately from the “coating gas” by Appellant, is not introduced onto this reactivity-altering material to generate the coating gas.

In Punola, as discussed above, it is the “coating gas” that is generated in gas generators 20, 22 that is passed over the reactivity-altering material to alter the reactivity of the coating gas. Thus, in Punola, no “process gas”, which is claimed separately from the “coating gas” by Appellant, is passed over the reactivity-altering material. It is only the coating gas itself of Punola that is passed over the reactivity-altering material to alter the reactivity of the coating gas. Punola, however, does disclose a “process gas”, which is separate from the “coating gas”, and which is passed over coating granules to form the coating gas. However, this “process gas” is the acid halide/carrier gas flow F that is supplied to the gas generators 20, 22 to flow over the aluminum pellets to form the aluminum trichloride or trifluoride coating gas. Col. 4, lines 62-66.

**C. Even A Broad Interpretation Of The Claim Terms  
“Process Gas”, “Coating Gas”, And “Generated” By The  
Examiner Cannot Change The Explicit Disclosure Of  
Punola**

In the Office Action, the Examiner argues that Appellant has not defined the claim terms “process gas” and “coating gas” within the specification and has used a dictionary to define “generate”. Thus, the Examiner states that she has given these limitations a broadest reasonable interpretation. Appellant respectfully submits

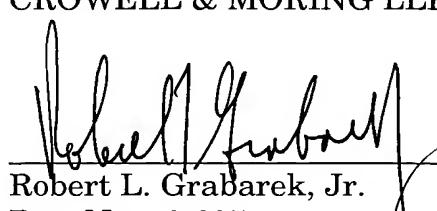
that even if the Examiner can give claims terms a broadest reasonable interpretation, these claim term interpretations cannot change the explicit disclosure of a reference.

Thus, Appellant respectfully submits that Punola explicitly discloses that the coating gas is formed by flowing an acid halide/carrier process gas flow F over the aluminum pellets in the gas generators 20, 22 to form the oxidation and corrosion resistant aluminide coating gas. Therefore, Appellant respectfully submits that even a broadest reasonable interpretation of the claim terms cannot change this explicit disclosure of Punola when the Examiner attempts to argue that Punola's passing of the already generated reactive coating gas through a reactive-altering material to alter the reactivity of the reactive coating gas discloses Appellant's claimed method.

### III. Conclusion

Appellant respectfully submits that independent claim 18, and the claims that depend therefrom, are allowable over Punola. As such, Appellant respectfully requests that the Examiner's rejections be withdrawn. Appellant further respectfully requests that withdrawn claims 28-30 and 33-34 be reentered in the patent application since they include the same special technical feature of independent claim 18.

Respectfully submitted,  
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